

L Number	Hits	Search Text	DB	Time stamp
2	19	((inert adj protein) or (polyethylene adj glycol)) same detergent same (gold or platinum or silver)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 13:39
3	418783	colloidal or gold or silver	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 13:39
4	1526	(gold or silver or colloidal) same detergent	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 13:40
5	56	(gold or silver or colloidal) same detergent same antibody	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 13:54
6	0	antibody same detergent same (gold adj partile)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 14:33
7	2	antibody same detergent same (gold adj particle)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 14:35
8	13	detergent same (gold adj particle)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 14:38
9	5	(gold adj conjugate) same detergent	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 14:40
10	1	biomolecule same detergent and (gold adj conjugate)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 14:49
11	48	(colloidal adj particle) same detergent	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 15:00
12	10	(colloidal adj particle) same detergent and assay	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 15:09
13	33	colloidal adj particle and detergent and biomolecule	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 15:20
14	4060	detergent same stabilizer	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 15:21
15	23	detergent same stabilizer same (conjugate)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 15:25
16	1	stabilizer same detergent same (colloidal adj particle)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/12/13 15:26

DOCUMENT-IDENTIFIER: US 6090800 A

TITLE: Lipid soluble steroid prodrugs

BSPR:

"Detergent " refers to a surface-active agent (surfactant) which when added to a suspending medium of colloidal particles, including, for example, certain of the lipid, polymer, protein, and/or vesicle compositions described herein, may promote uniform separation of particles. "Detergent " also refers to a surface-active agent (surfactant) which lowers the surface tension of water.

DOCUMENT-IDENTIFIER: US 5972720 A

TITLE: Stabilization of metal conjugates

BSPR:

After the colloidal particles have been loaded with the respective desired /
biomolecule it is necessary to stabilize the conjugates. This stabilization is
intended to minimize an aggregation of the particles and to saturate remaining
free surfaces accessible to adsorption. In the state of the art inert
proteins, e.g. bovine serum albumin, blood substitute mixtures etc., detergents
such as TWEEN.RTM. 20, water-soluble technical polymers such as polyethylene
glycol (molecular weight 20,000 D), polyvinylpyrrolidone, polyvinyl alcohol,
polyvinyl sulfate, dextran and gelatin are used as stabilizers (cf. e.g. De
Mey, Supra; Beesley, Supra; Behnke, Eur. J. Cell Biol. 41 (1986), 326-338; DE
24 20 531 C3; and Meisel et al., J. Phys. Chem. 85 (1981), 179-187). In
addition the possibility of stabilizing gold sols by phosphane complex ligands
has also been described (Schmid et al., Z. Naturforsch. 45b (1994), 989-994).

Need detergent + biomolecules

add PEG afterwards

*- detergent + biomolecules
- add gold particle
- add stabilizer*

DOCUMENT-IDENTIFIER: US 6284194 B1

TITLE: Analytical assay device and methods using surfactant treated membranes to increase assay sensitivity

DEPR:

For use in immunoassays, where the target substance is an antibody, for example, antibody to HIV, a preferred detection reagent is Protein A/colloidal gold diluted in a detergent composition as detailed below. In the case of an HIV immunoassay, the receptor molecule is HIV antigen. If IgG antibody to HIV is present in the sample, it will bind to the receptor reagent. Protein A/colloidal gold then binds to the Fc region of the IgG, and a reddish-purple color is apparent at the receptor area of the reaction membrane. A preferred diluent for the Protein A/colloidal gold is a detergent-containing composition comprising one or more of the following detergents: TRITON.RTM. X-305, TRITON.RTM. X-100, TWEEN.RTM. 20, PLURONIC.RTM. L64, and BRIJ.RTM. 35. The TRITON.RTM. series of detergents are nonionic detergents comprising polyoxyethylene ethers and other surface-active compounds. The PLURONIC.RTM. series are nonionic surfactants that are partial esters of block copolymers of poly(oxyethylene-co-oxypropylene). The TWEEN.RTM. series are derived from the SPAN.RTM. products by adding polyoxyethylene chains to the nonesterified hydroxyls. BRIJ.RTM. 35 is a trademark of the Pierce Chemical Company, Rockford, Ill., and is a 30% solution of polyoxyethylene lauryl ether detergent. Any combination of the above-listed detergents can be used. Usually, the final concentration of detergent is in the range of from about 0.5% to about 3.0% detergent; about 1.0 to 1.5% detergent usually works best. If much less than 0.5% detergent is used, non-specific binding of sample and reagents may result in background noise that interferes with the assay results. If much more than 3.0% detergent is used, assay sensitivity can be compromised. For an HIV immunoassay, good results have been obtained using a wash buffer having 0.20% of each of the five detergents listed above prepared in a 0.2M Tris buffer. The best combination for a given assay can be determined using routine experimentation. For immunoassays, the final pH of the detection reagent may affect the sensitivity of the assay. Therefore, it will be desirable to determine which buffer provides the best results for a given assay.

DEPR:

Serial dilutions of a serum sample containing antibody to CMV were made into normal human serum. 40 .mu.l of each dilution were added to the exposed surface of the reaction membrane of the analytical devices. After all of the serum had absorbed into the reaction membrane, 80 .mu.l of the Protein A/colloidal gold-detergent solution were added to the reaction membrane, and allowed to flow through the reaction membrane. Three drops of the detergent

solution used to dilute the Protein A/colloidal gold were added to the reaction membrane as a final wash step. Presence of colloidal gold at the receptor area was determined using a Dot Master Reader (DMR), from EY Laboratories, San Mateo, Calif. The DMR reading increases with increasing concentration of colloidal gold at the receptor area. The results are shown in Table I.